PLAN
Carbon Impact Assessment

C-Plan User Guide for Developers

Dacorum Borough Council

ecsc
Energy Centre for
Sustainable Communities

JULY 11

C-PLAN
Carbon Impact Assessment

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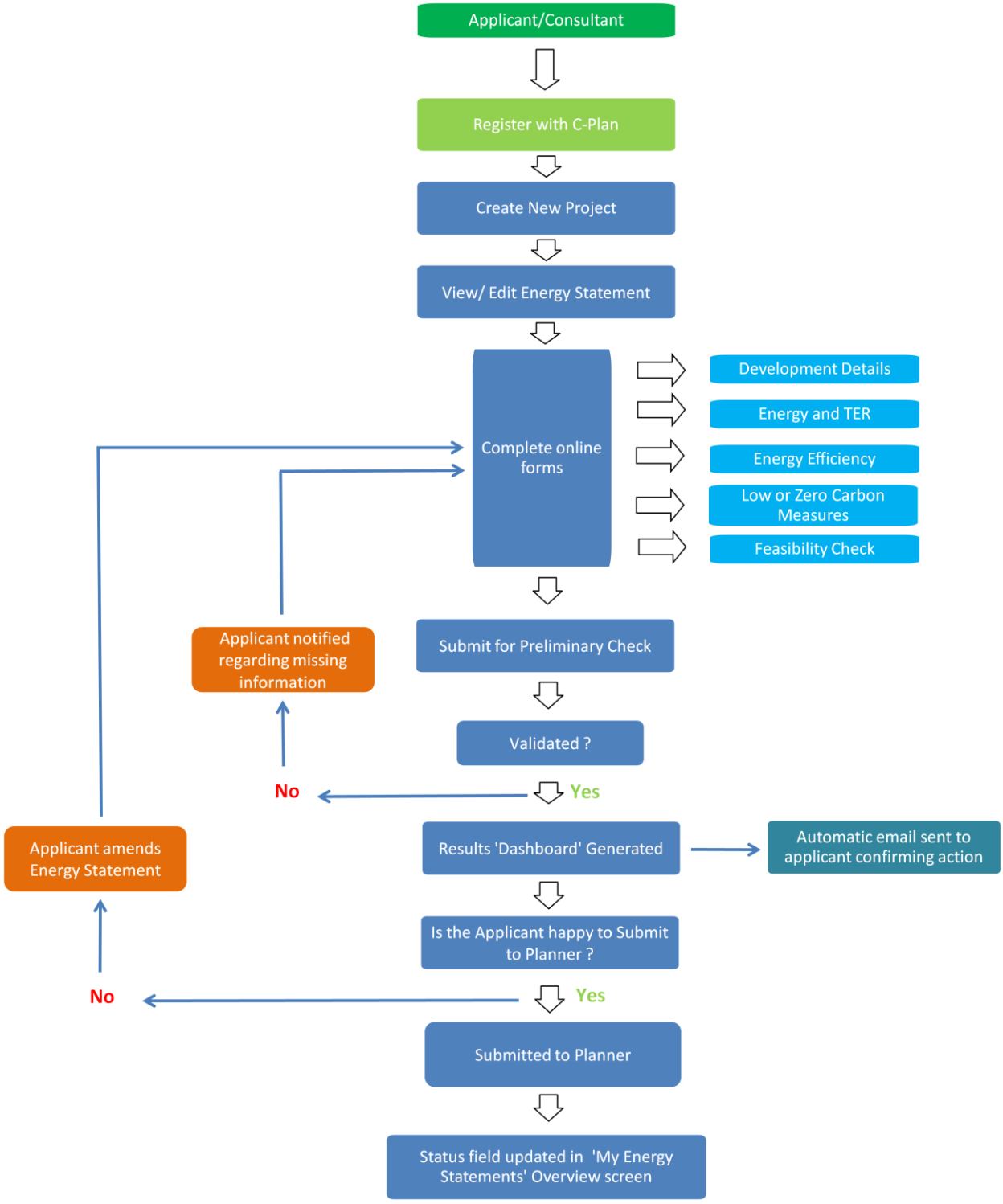
1. Introduction

This guide is intended to introduce developers to the C-Plan system and to help in the process of uploading data regarding an application, generating the Energy Statement from the uploaded data and submitting the online Energy Statement to the relevant local authority.

The guide is split into a number of sections to outline the process to go through to do this and includes guidance on how to use the range of tools provided within the C-Plan system.

2. The C-Plan Process



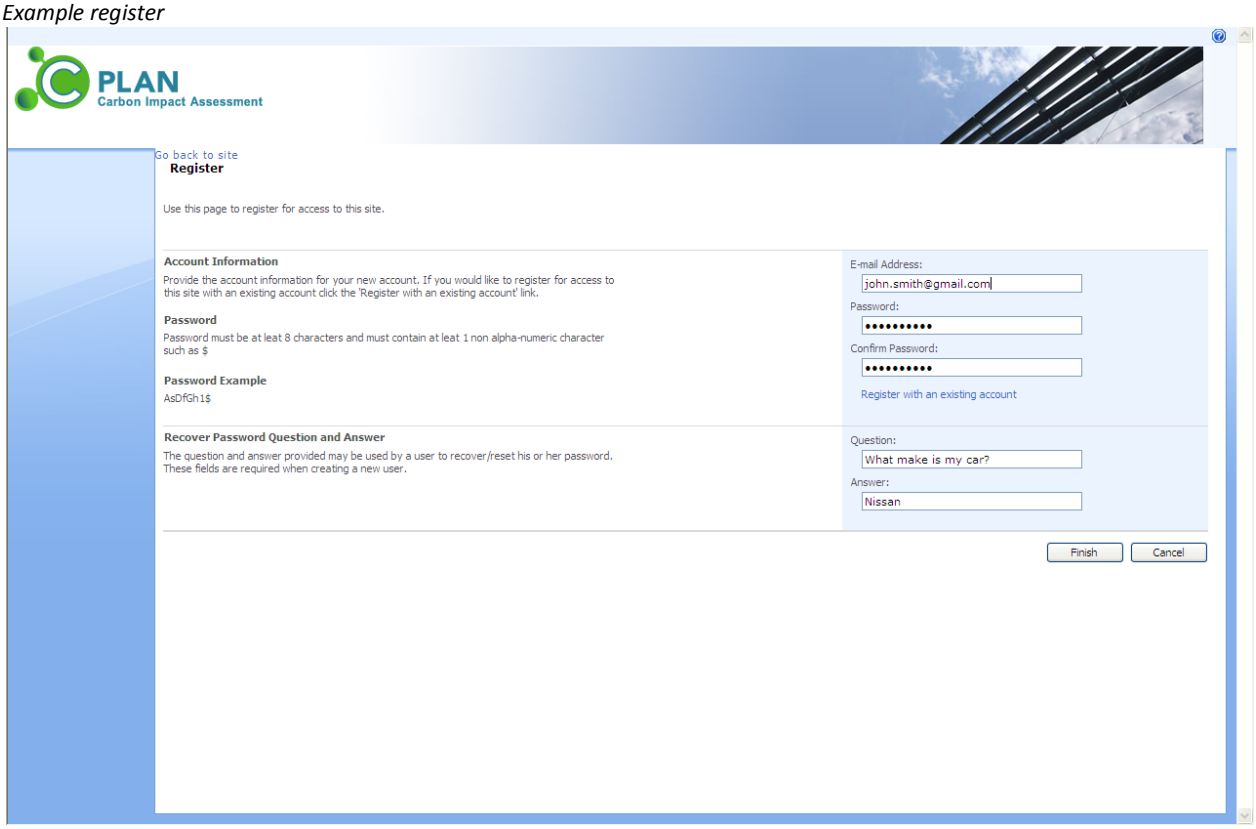
3. Registering with C-Plan

To register with C-Plan, go to www.sustainabilityplanner.co.uk and click on the relevant Local Authority link at the bottom.

On each local authority site there is information about the local requirements and a link to their policy. Click on Register on the top right of the page.

This goes to the registration page; from there you can register for a user account. Please remember that passwords must be at least 8 characters and must contain at least 1 non alpha-numeric character such as $.

Example register


PLAN
Carbon Impact Assessment
Go back to site
Register
Use this page to register for access to this site.
Account Information
Provide the account information for your new account. If you would like to register for access to this site with an existing account click the 'Register with an existing account' link.
Password
Password must be at leat 8 characters and must contain at leat 1 non alpha-numeric character such as $
Password Example
AsDfGh1$
E-mail Address:
john.smith@gmail.com
Password:
Confirm Password:
Register with an existing account
Recover Password Question and Answer
The question and answer provided may be used by a user to recover/reset his or her password. These fields are required when creating a new user.
Question:
What make is my car?
Answer:
Nissan
Finish
Cancel

4. Logging in to C-Plan system

Once you have registered and have your user name and password you can log into C-Plan in a number of ways.

We suggest you write your C-Plan user name and password in the box below for reference purposes. **Please keep this safe and do not share it with others.**

Username:	Password:

In Internet Explorer -

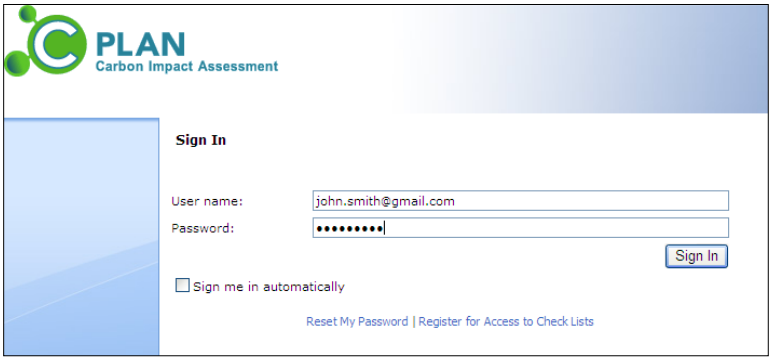
Enter URL: www.sustainabilityplanner.co.uk/ and click on the relevant Council link at the bottom to bring up the home page (you may want to save this to your favourites or create a shortcut on your desk top).

On the home page -

Click Sign In (on the right hand side of the page) to direct you to the signing in page allowing you to enter your user name and password.

Enter user Name e.g. john.smith@gmail.com (Note: user name is your e-mail address)
Enter Password: e.g. JohnR703#

Example sign in

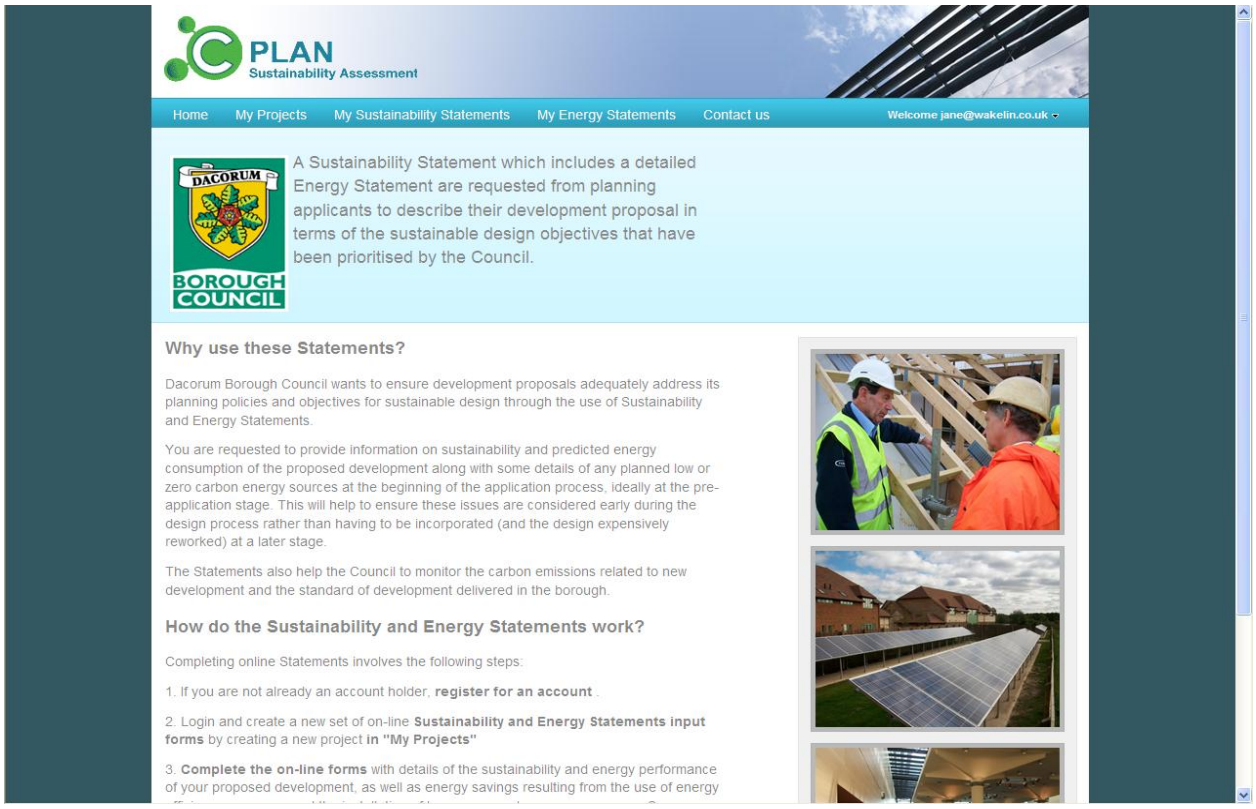


Important Note

- The user name and password are both case sensitive
- If you lose or forget your password please use the 'reset my password' facility on the webpage or contact C-Plan help and support team on [cplan@ecsc.uk.com and 01483 749 048]
- Only energy statements or other information relevant to the current logged in user can be viewed from an account.

5. Getting started in C-Plan

Once you have logged in, you will be taken to the home page, introducing C-Plan and the energy statement process. From here you can enter each area of C-Plan which is relevant to you.


PLAN
Sustainability Assessment
Home
My Projects
My Sustainability Statements
My Energy Statements
Contact us
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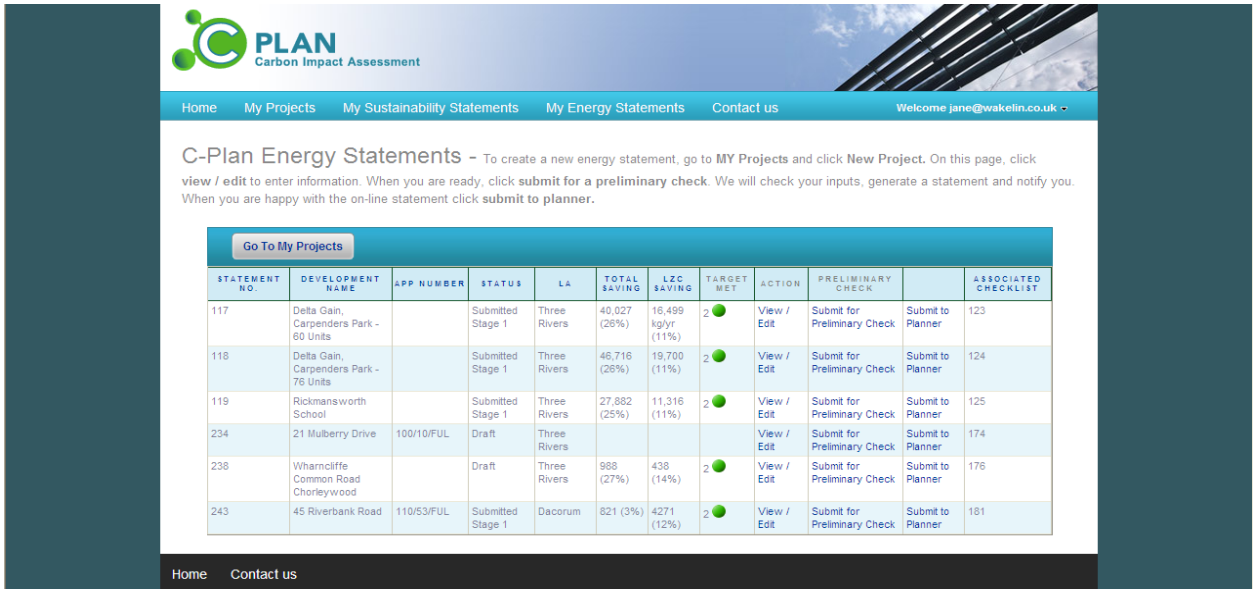
DACORUM
BOROUGH COUNCIL
A Sustainability Statement which includes a detailed Energy Statement are requested from planning applicants to describe their development proposal in terms of the sustainable design objectives that have been prioritised by the Council.
Why use these Statements?
Dacorum Borough Council wants to ensure development proposals adequately address its planning policies and objectives for sustainable design through the use of Sustainability and Energy Statements.
You are requested to provide information on sustainability and predicted energy consumption of the proposed development along with some details of any planned low or zero carbon energy sources at the beginning of the application process, ideally at the pre-application stage. This will help to ensure these issues are considered early during the design process rather than having to be incorporated (and the design expensively reworked) at a later stage.
The Statements also help the Council to monitor the carbon emissions related to new development and the standard of development delivered in the borough.
How do the Sustainability and Energy Statements work?
Completing online Statements involves the following steps:
1. If you are not already an account holder, register for an account .
2. Login and create a new set of on-line Sustainability and Energy Statements input forms by creating a new project in "My Projects"
3. Complete the on-line forms with details of the sustainability and energy performance of your proposed development, as well as energy savings resulting from the use of energy

On the top click the ‘My Energy Statements’ tab to go to the Energy Statements.

This will navigate you to the “My Energy Statements” overview page. To view or edit an existing energy statement, click on the ‘view/ edit’ link beside the project you wish to view or edit.


PLAN
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Home
My Projects
My Sustainability Statements
My Energy Statements
Contact us
Welcome jane@wakelin.co.uk
C-Plan Energy Statements - To create a new energy statement, go to MY Projects and click New Project. On this page, click view / edit to enter information. When you are ready, click submit for a preliminary check. We will check your inputs, generate a statement and notify you. When you are happy with the on-line statement click submit to planner.
Go To My Projects
STATEMENT NO.
DEVELOPMENT NAME
APP NUMBER
STATUS
LA
TOTAL SAVING
LZC SAVING
TARGET MET
ACTION
PRELIMINARY CHECK
ASSOCIATED CHECKLIST
117 Delta Gain, Carpenders Park - 60 Units Submitted Stage 1 Three Rivers 40,027 (26%) 16,499 kg/yr (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 123
118 Delta Gain, Carpenders Park - 76 Units Submitted Stage 1 Three Rivers 46,716 (26%) 19,700 (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 124
119 Rickmansworth School Submitted Stage 1 Three Rivers 27,882 (25%) 11,316 (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 125
234 21 Mulberry Drive 100/10/FUL Draft Three Rivers View / Edit Submit for Preliminary Check Submit to Planner 174
238 Wharncliffe Common Road Chorleywood Draft Three Rivers 988 (27%) 438 (14%) 2 View / Edit Submit for Preliminary Check Submit to Planner 176
243 45 Riverbank Road 110/53/FUL Submitted Stage 1 Dacorum 821 (3%) 4271 (12%) 2 View / Edit Submit for Preliminary Check Submit to Planner 181
Home
Contact us

6. Creating an Energy Statement in C-Plan

If you wish to start a new Energy Statement, click either on the 'My Projects' tab or the 'Go to My Projects' button.

Once there, click on the 'New Project' button

PLAN
Carbon Impact Assessment
Sustainability checklist
Home
My Projects
My Sustainability Statements
My Energy Statements
Contact us
Welcome jane@wakelin.co.uk
Projects - Click NEW Project Button below to start a new project.
NEW Project (click here)
ID
DEVELOPMENT NAME
APP NUMBER
STATUS
123 Delta Gain, Carpenders Park - 60 Units Submitted Check List Energy Statement
124 Delta Gain, Carpenders Park - 72 Units Draft Check List Energy Statement
125 Rickmansworth School Draft Check List Energy Statement
174 21 Mulberry Drive 100/10/FUL Draft Check List Energy Statement
176 Wharncliffe Common Road Chorley Road Draft Check List Energy Statement
181 45 Riverbank Road 110/53/FUL Draft Check List Energy Statement
Home
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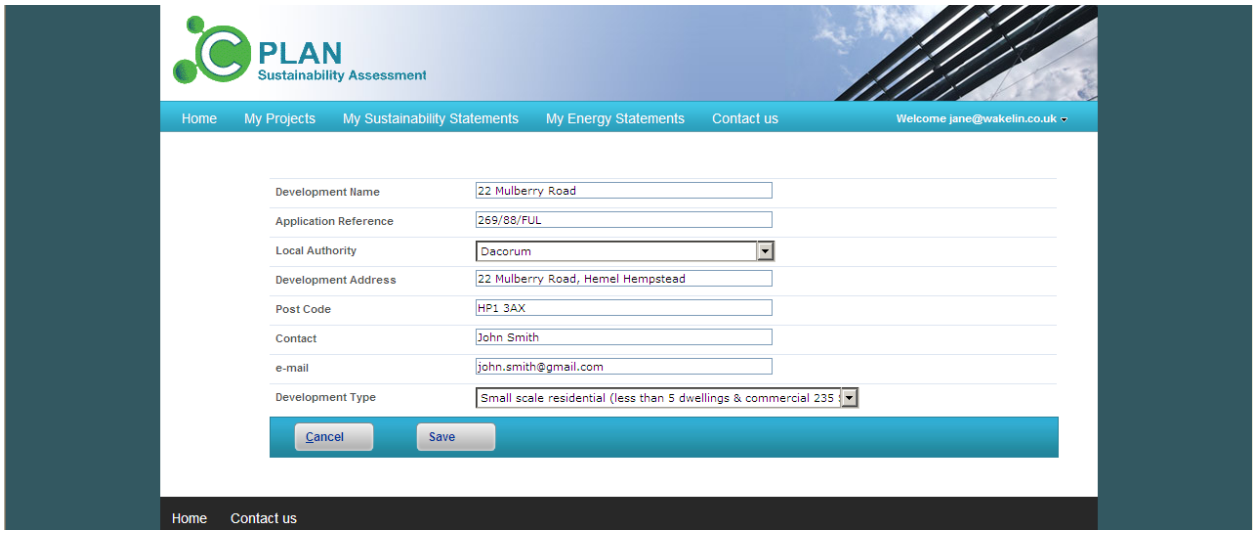
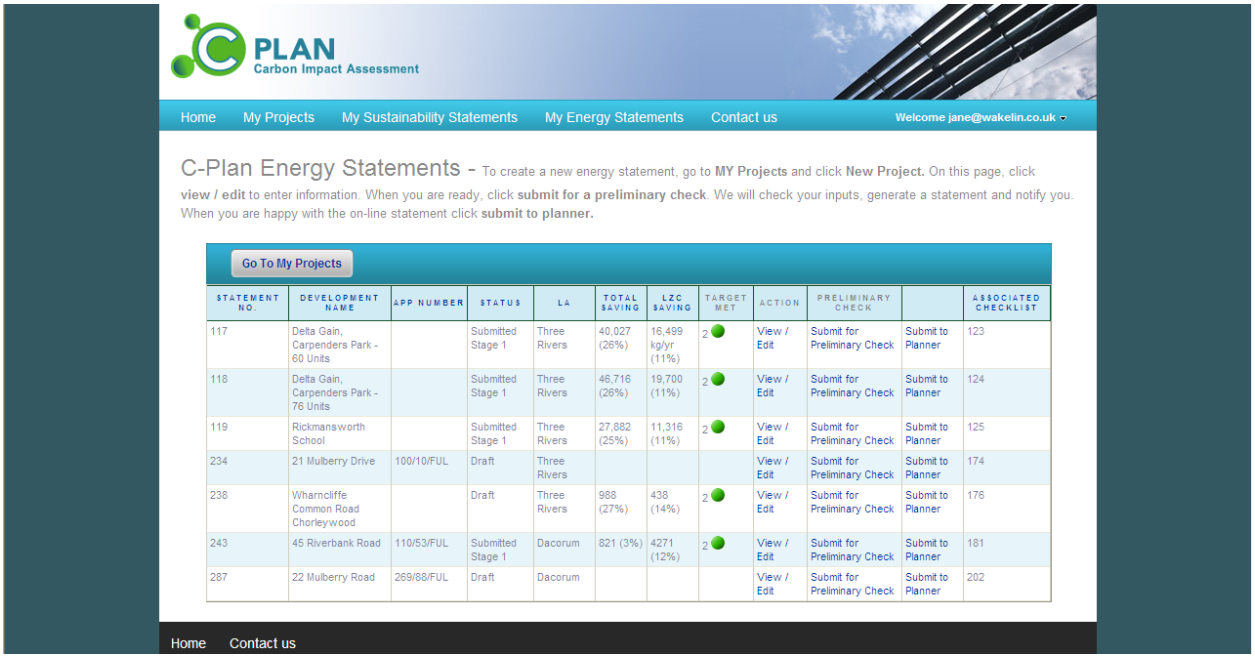
Fill in the details of your application. Some of the detail are mandatory and are marked with a red asterix*



Once filled in press the 'Save and Close' button.

This will generate the new blank energy statement. You can either access by clicking on the link 'energy statement' beside the projects name on the 'My Projects' page or you can click on the 'My Energy Statement' tab on top. Either will take you to the Energy Statements overview page.

To edit your new blank energy statement, click on the 'view/ edit' link beside the project you wish to edit.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Go To My Projects
STATEMENT NO.
DEVELOPMENT NAME
APP NUMBER
STATUS
LA
TOTAL SAVING
LZC SAVING
TARGET MET
ACTION
PRELIMINARY CHECK
ASSOCIATED CHECKLIST
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243 45 Riverbank Road 110/53/FUL Submitted Stage 1 Dacorum 821 (3%) 4271 (12%) 2 View / Edit Submit for Preliminary Check Submit to Planner 181
287 22 Mulberry Road 269/88/FUL Draft Dacorum View / Edit Submit for Preliminary Check Submit to Planner 202
Home
Contact us

This will take you to the blank energy statement where you can start inputting the data of the development.

There are 5 sections to the energy statement:

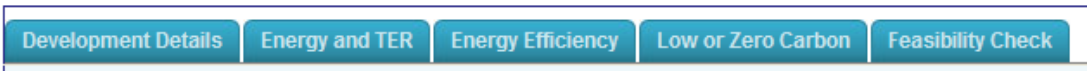
> Development Details

> Energy and TER

> Energy Efficiency

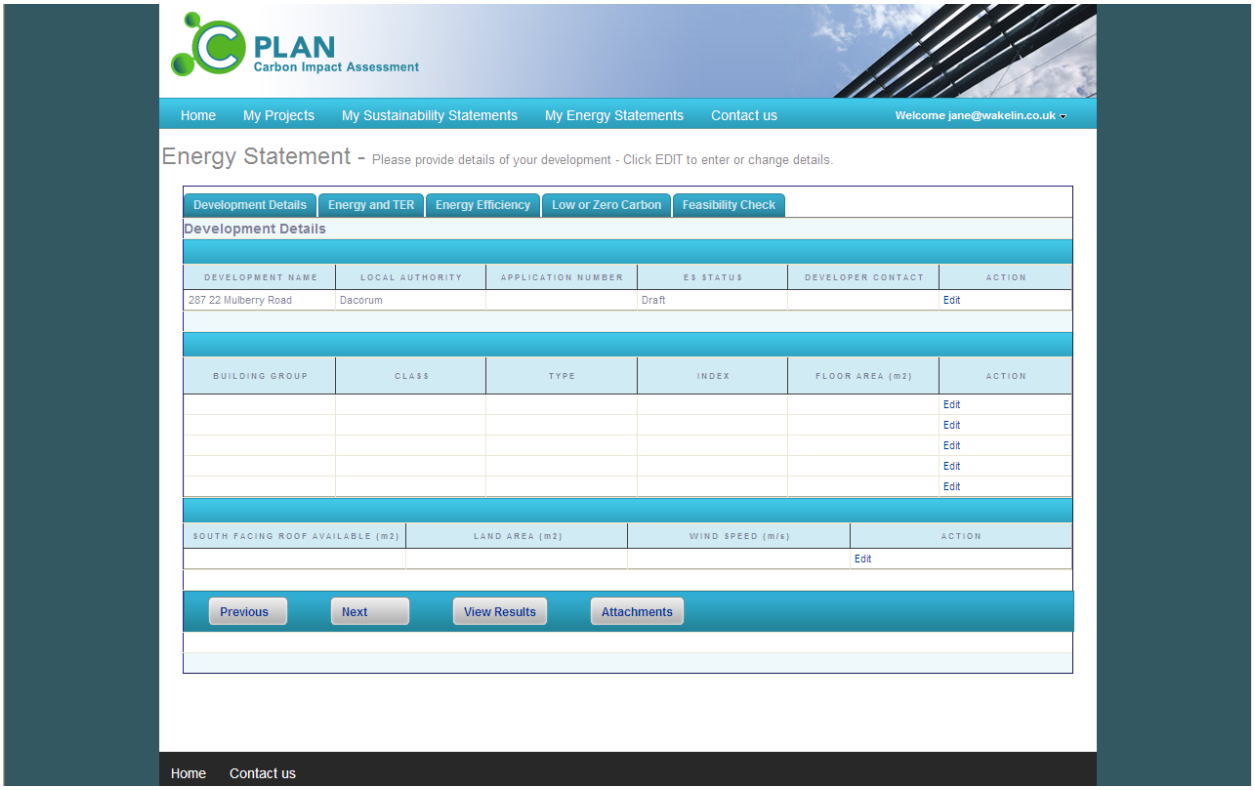
>Low or Zero Carbon

> Feasibility Check

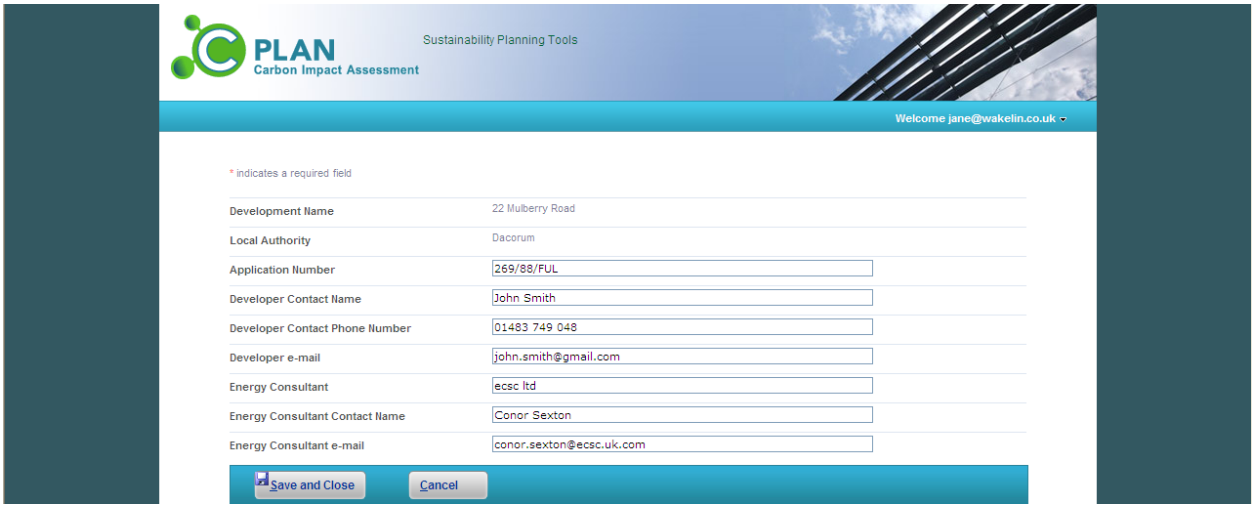


6.1 Development Details

Development Details - this screen covers the details of the proposed development and has three sets of sub forms which can be accessed by clicking edit on the right hand side of the main form:

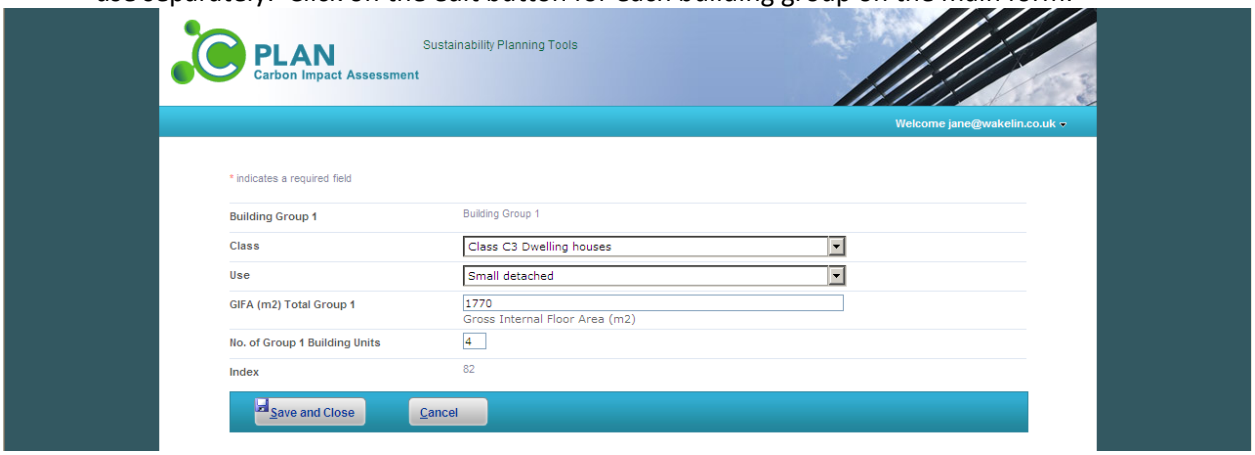


1. Application Details (to input the details click ‘edit’ on the right hand side of the main form) Fill in the details of the planning application as follows, Application Number, Developer Contact Name, Developer Contact Phone Number, Developer e-mail, Energy Consultant, Energy Consultant Contact Name, Energy Consultant e-mail.

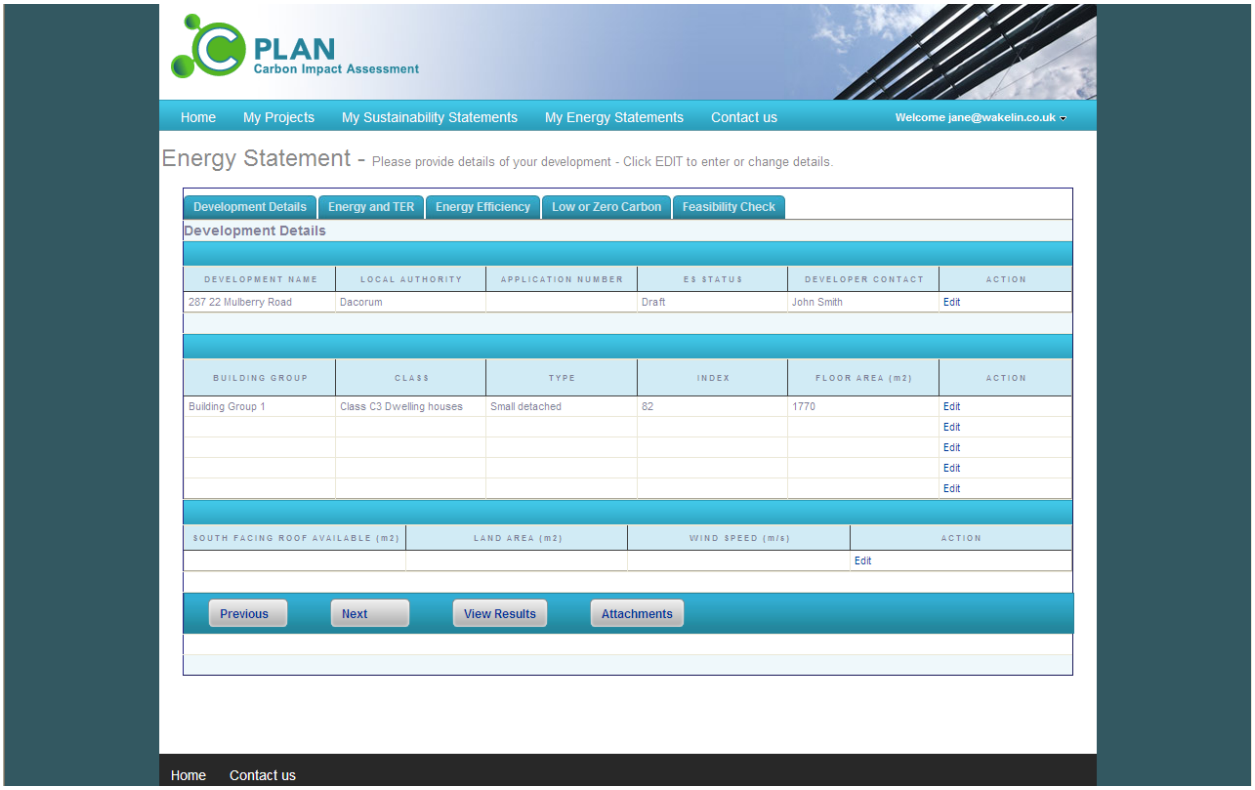


Once completed click the ‘save and close’ button, this will return you back to the ‘Development Details’ page.

2. Development Description – this is where to input each different type of building group and their use separately. Click on the edit button for each building group on the main form.

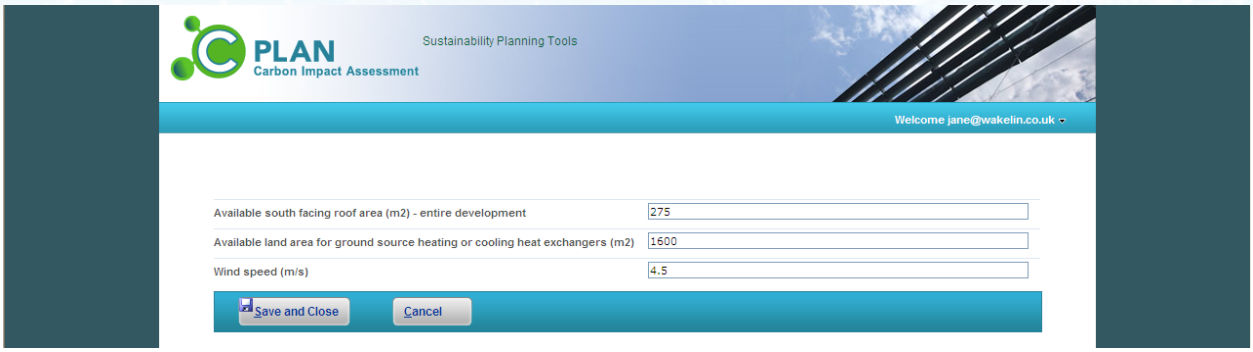


Put in details of building classes, uses, gross Internal Floor Area (GIFA) and no. of building units in the group. For each type of building use, put in the total floor area and list how many units is in that building group (e.g. four 100m^2 semi-detached houses would be entered as follows: Building Class = Class C3 Dwelling houses, Building Use = Semi-detached, GIFA (m2) Total for Group 1 = 400m^2, No. of Group 1 Building Units = 4).

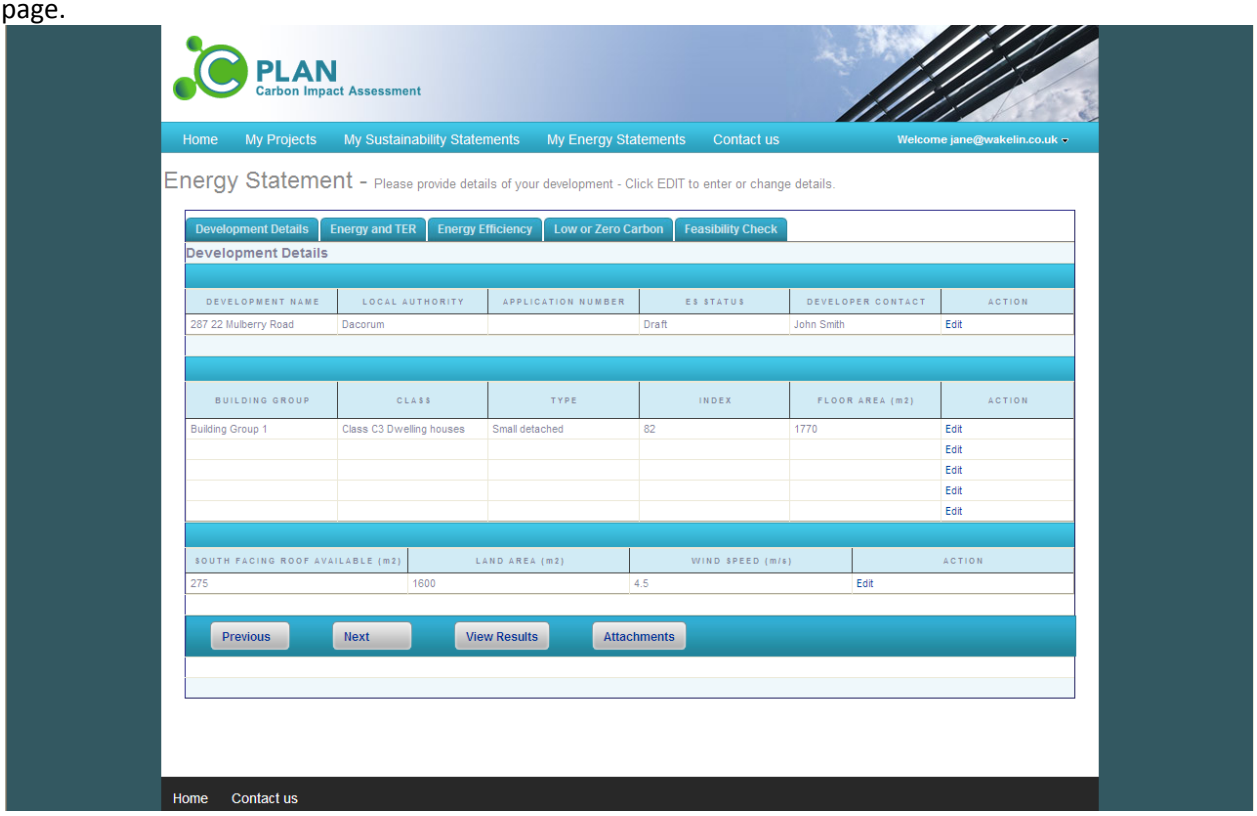


Repeat for each required building group.

3. Site Details – This is the screen to enter information regarding available South facing roof space, land area for ground source heat pumps (GSHP) and wind speed (metres per second). (To input the details click 'edit' in the right hand column)



Once completed click the 'save and close' button, this will return you back to the 'Development Details' page.



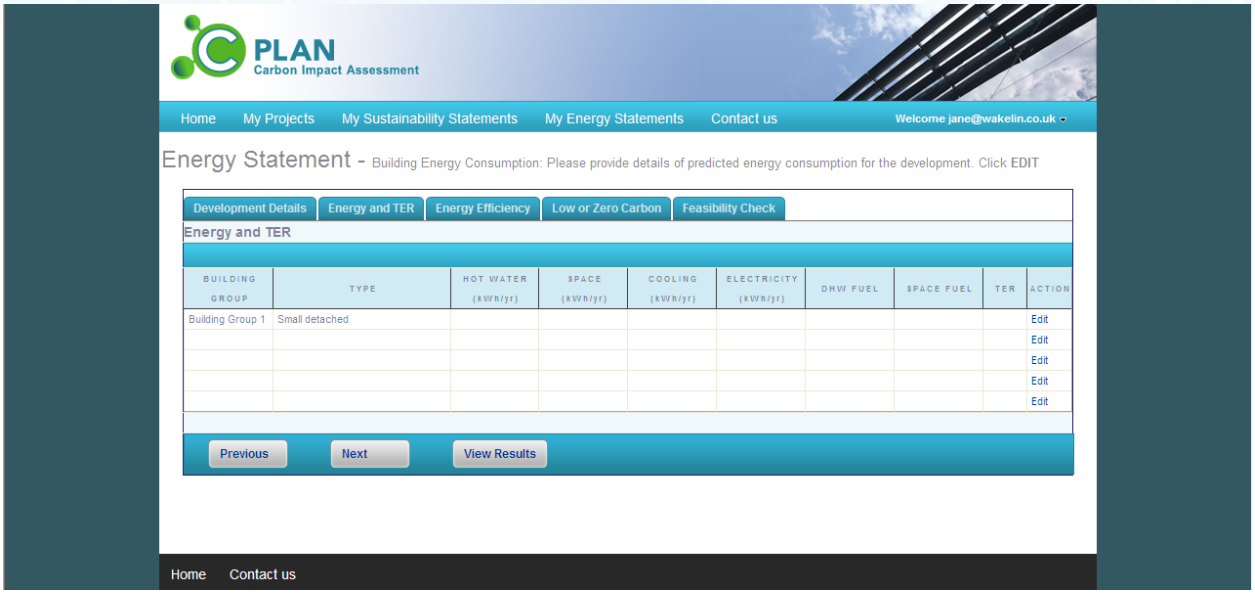
That completes the Development Details section.

Attachments

- If you wish to attach any documents such as SAP or SBEM calculations, you can do so by clicking the 'Attachments' button on the bottom of the 'Development Details' page. This will take you to the attachments page where you can attach the documents.

6.2 Energy and TER

Energy and TER - this is the screen to input details of the estimated predicted energy consumption and estimated Target Emission Rate (TER) of the proposed development.



You will be required to input the required details for each type of building group you have created. In this example there is one building group – Class D3 Dwelling Houses, Small Detached. (To input the details click 'edit' on the right hand side across from the first building type)

There are seven inputs as follows:

Input No. 1 - **Hot Water heating fuel consumed in proposed DER / BER building**

The Dwelling Emission Rate (DER) or Building Emission Rate (BER) building refers to the proposed building group after any proposed energy efficiency measures and renewable energy generation technologies have been incorporated. Please input the estimated predicted fuel consumption in total kWh per year used to supply domestic hot water to the building group. If you have SAP calculations to demonstrate compliance with 2010 Part L building regulations, you can get this figure from input box 219 of the SAP worksheet. If no SAP or SBEM is available, this figure can be derived from benchmarks based on typical consumption figures for the proposed building type. If a biomass heating system is used, enter the fuel consumption from box 219 as normal but also indicate biomass as the water heating system fuel using the input box provided.

Input No. 2 - **Space heating fuel consumed in proposed DER / BER building**

The Dwelling Emission Rate (DER) or Building Emission Rate (BER) building refers to the proposed building group after any proposed energy efficiency measures and renewable energy generation technologies have been incorporated. Please input the estimated predicted fuel consumption in total kWh per year used to supply space heating to the building group. If you have SAP calculations to demonstrate compliance with 2010 Part L building regulations, you can get this figure from input box 211 of the SAP worksheet. If no SAP or SBEM is available, this figure can be derived from benchmarks based on typical consumption figures for the proposed building type. If a biomass heating system is used, enter the fuel consumption from box 211 as normal but also indicate biomass as the space heating system fuel using the input box provided.

Input No. 3 - **Space cooling fuel used in proposed DER / BER building**

The Dwelling Emission Rate (DER) or Building Emission Rate (BER) building refers to the proposed building group after any proposed energy efficiency measures and renewable energy generation technologies have been incorporated. Please input the estimated predicted fuel consumption in total kWh per year used to supply cooling to the building group. If you have SAP calculations to demonstrate compliance with 2010 Part L building regulations, you can get this figure from input box 221 of the SAP worksheet. If no SAP or SBEM is available, this figure can be derived from benchmarks based on typical consumption figures for the proposed building type.

Input No. 4 - **Electricity used by pumps, lighting and electric secondary heating**

The Dwelling Emission Rate (DER) or Building Emission Rate (BER) building refers to the proposed building group after any proposed energy efficiency measures and renewable energy generation technologies have been incorporated. Please input the estimated predicted electricity consumption in total kWh per year after renewable generation has been deducted. If you have SAP calculations to demonstrate compliance with 2010 Part L building regulations, you can get this figure from SAP worksheet input boxes 231 + 232 (+215 if electric secondary heating is used). If an electricity generation source such as PV is used, add box 233 (this is a negative value).

Input No. 5 - **Main space heating system fuel**

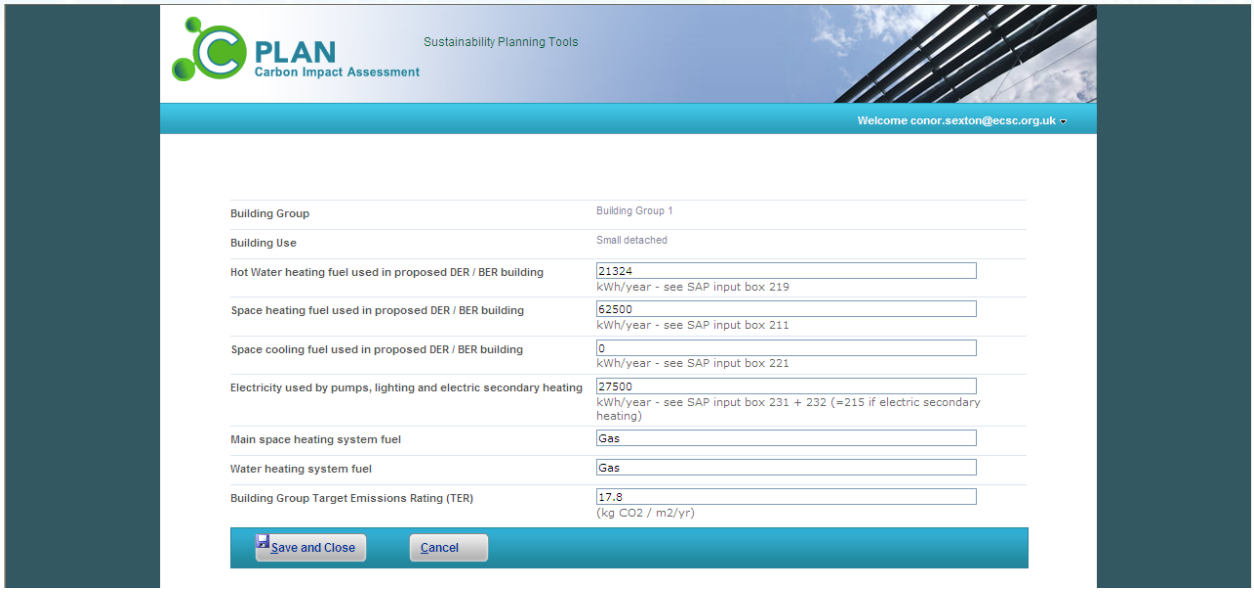
Please input the main space heating fuel, e.g. gas, oil, electricity biomass etc.

Input No. 6 - **Water heating system fuel**

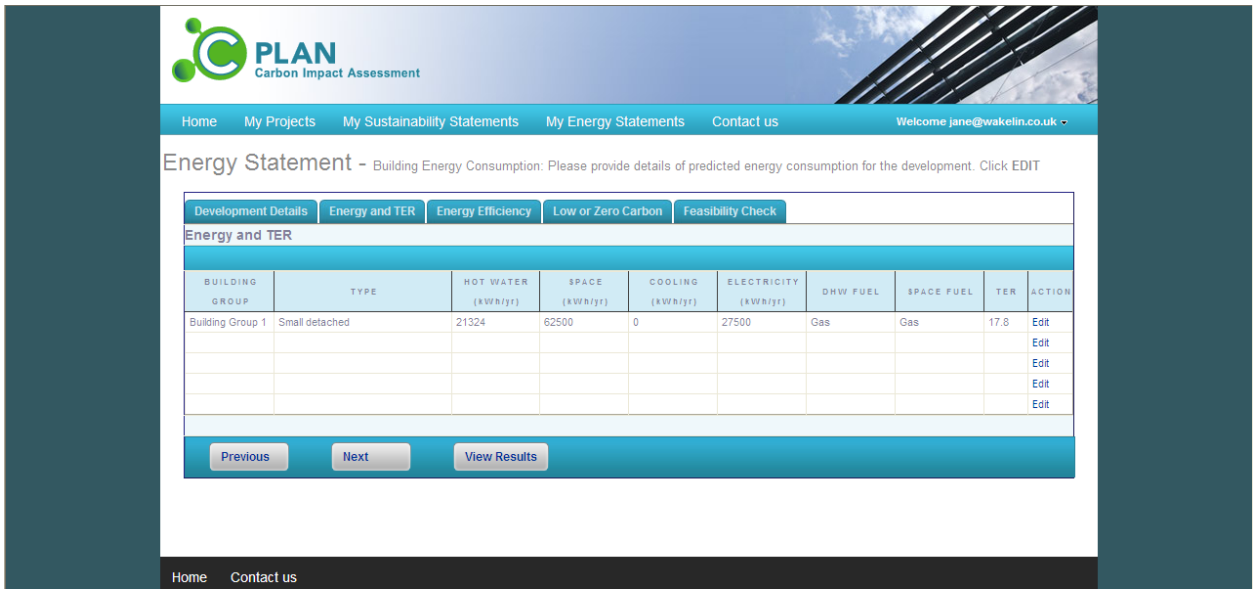
Please input the water heating fuel, e.g. gas, oil, electricity etc.

Input No. 7 - **Building Group Target Emissions Rating (TER)**

This is the minimum level of emissions in kg of CO_2 per m^2 (estimated) that the building group needs to achieve in order to comply with 2010 Building Regulations. This figure can be obtained from SAP or SBEM calculations if they have been carried out for the development or from benchmarks of typical building types if no SAP or SBEM is available.


PLAN
Carbon Impact Assessment
Sustainability Planning Tools
Welcome conor.sexton@ecsc.org.uk
Building Group
Building Group 1
Building Use
Small detached
Hot Water heating fuel used in proposed DER / BER building
21324
kWh/year - see SAP input box 219
Space heating fuel used in proposed DER / BER building
62500
kWh/year - see SAP input box 211
Space cooling fuel used in proposed DER / BER building
0
kWh/year - see SAP input box 221
Electricity used by pumps, lighting and electric secondary heating
27500
kWh/year - see SAP input box 231 + 232 (=215 if electric secondary heating)
Main space heating system fuel
Gas
Water heating system fuel
Gas
Building Group Target Emissions Rating (TER)
17.8
(kg CO2 / m2/yr)
Save and Close
Cancel

Once completed click the 'save and close' button, this will return you back to the 'Energy and TER' page.



Repeat for each Building Group.

6.3 Energy Efficiency

This is the screen to input details of the energy efficiency measures which are to be taken and the estimated CO_2 emissions improvement over building regulations minimum regulations requirement which will result.

(to input the details click 'edit' on the right hand side across from the first building type)

There are three inputs as follows:

Input 1 - **Energy Efficiency Standard**

There are two options to choose from:

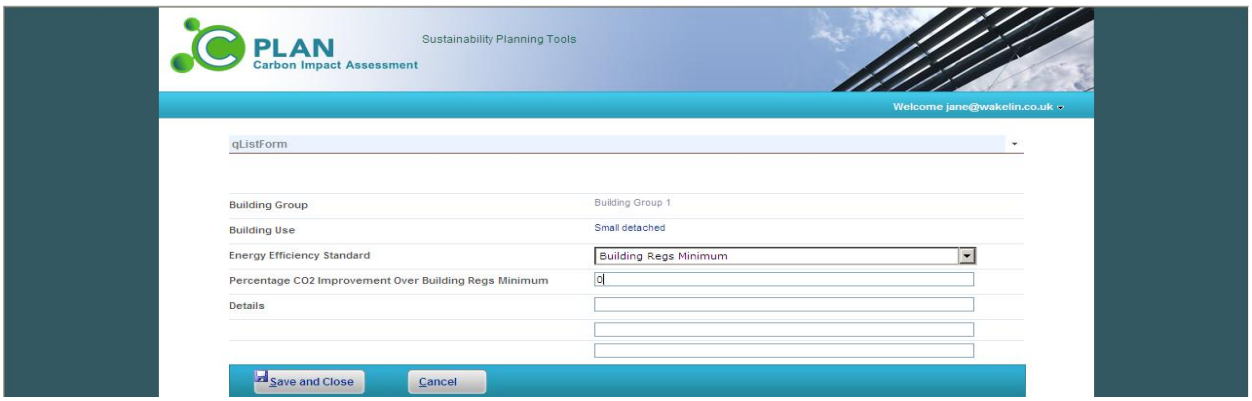
1. Building Regs Minimum – choose this if the developments energy efficiency standards have been built to minimum standards.
2. Improvement over Building Regs - choose this if the developments energy efficiency standards have been built to improve over the minimum standards.

Input 2 - **Percentage CO_2 Improvement Over Building Regs Minimum**

If you have chosen 'Building Regs Minimum' then enter 0. If you have chosen 'Improvement over Building Regs' then enter the percentage improvement in Energy Efficiency over the Building Regs.

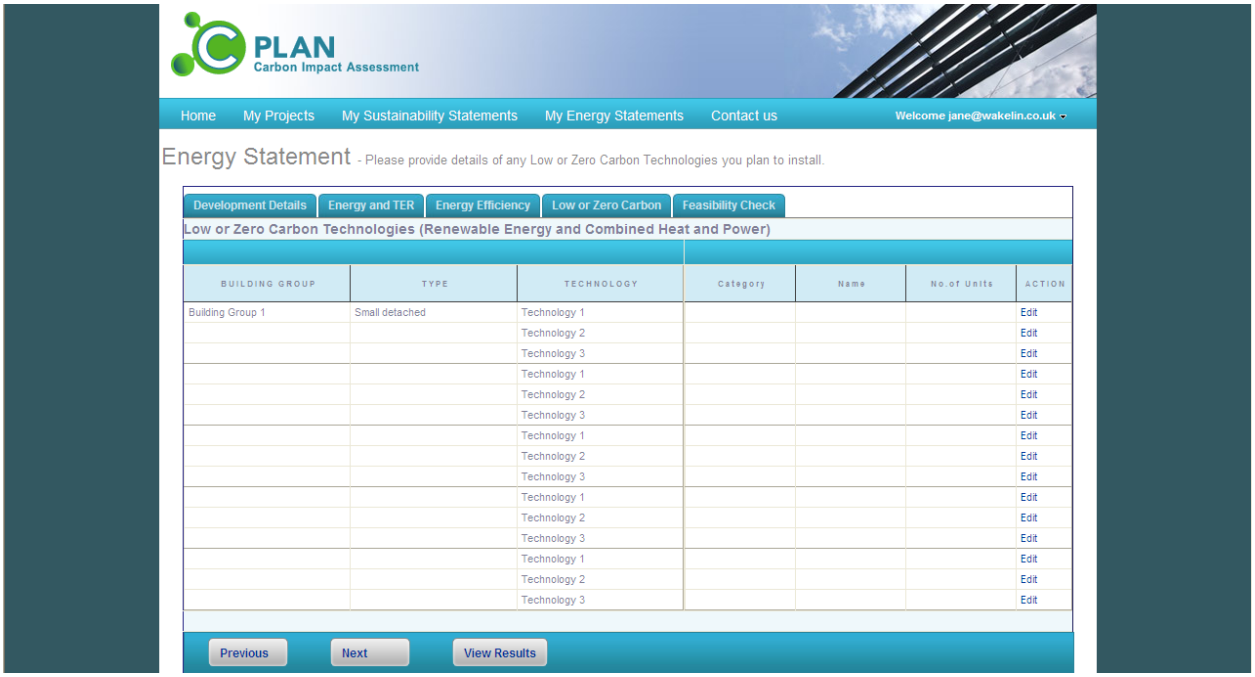
Input 3 – **Details**

If you have chosen 'Improvement over Building Regs' then enter the details of the Energy Efficiency Improvements.



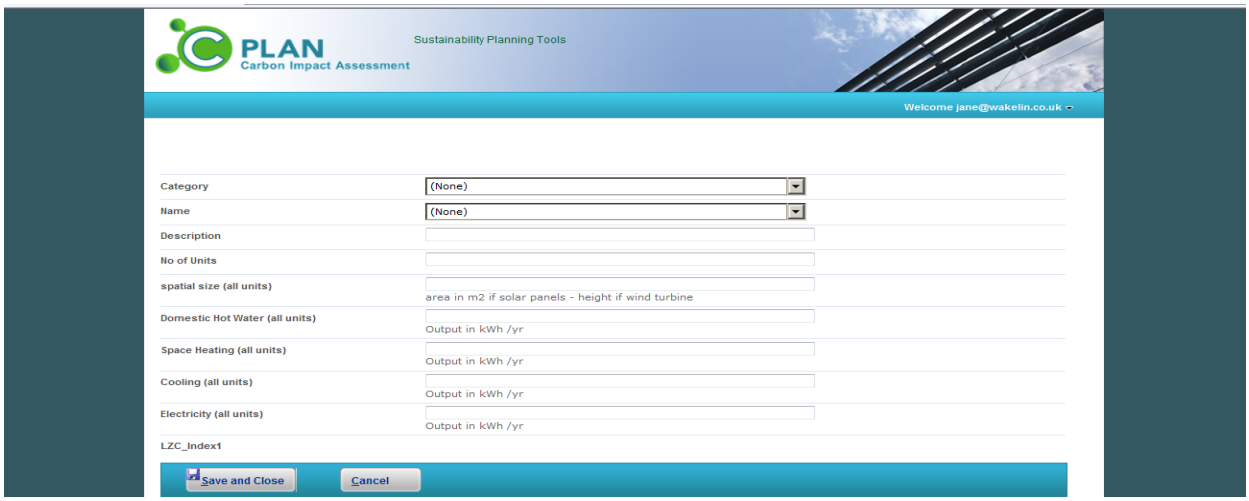
6.4 Low or Zero Carbon

Low or Zero Carbon (LZC) - this is the screen to input details of the proposed LZC technologies to be incorporated into the development.



You will be required to input details of the LZC technologies to be incorporated into each building group you created. You can input 3 different LZC technologies for each building group. In this example there is one building group – Class D3 Dwelling Houses, Small Detached and with one LZC technology – Solar Hot Water (SHW).

To start entering information about the first LZC technology click the first 'edit' link across from the first building group.



There are nine inputs as follows:

Input 1 - **Category**

Choose the type of LZC technology from the drop down menu.

SHW = Solar Hot Water
PV = Photovoltaic
GSHP = Ground Source Heat Pump
ASHP = Air Source Heat Pump
Biomass
Wind
Water Power = (Hydro Electricity)
CHP = Combined Heat and Power
GCC = Ground Coupled Cooling

Input 2 – **Name**

Based on the Category selected in input 1, select the name of the technology.

SHW = Flat plate or Evacuated Tube
PV = Photovoltaic Panels or Photovoltaic Tiles
GSHP = Horizontal Slinkies or Vertical Bore
ASHP = Air to Air or Air to Water
Biomass = Boiler or Room Heater
Wind = Stand Alone or Roof Mounted or Vertical Axis
Water Power = Turbine
CHP = Gas Fired or Community Energy or Biomass CHP
GCC = Ground Coupled Cooling

Input 3 – **Description**

Input a description of the LZC technology. E.g. Mitsubishi TD 225 Polycrystalline Silicon Solar Panels.

Input 4 – **No of Units**

Input the number of units. E.g. if there are to be 2 wind turbines, then enter 2.

Input 5 – **spatial size (all units)**

Input the area in m^2 if solar panels - height if wind turbine.

Input 6 – **Domestic Hot Water (all units)**

If the LZC technology selected produces hot water, please specify the output in kWh /yr. (i.e. Useful demand met) of the system. Please note that the figure required is simply the energy output of the system, **not** the consumption saving which takes account of the efficiency of the displaced system.

Input 7 – **Space heating (all units)**

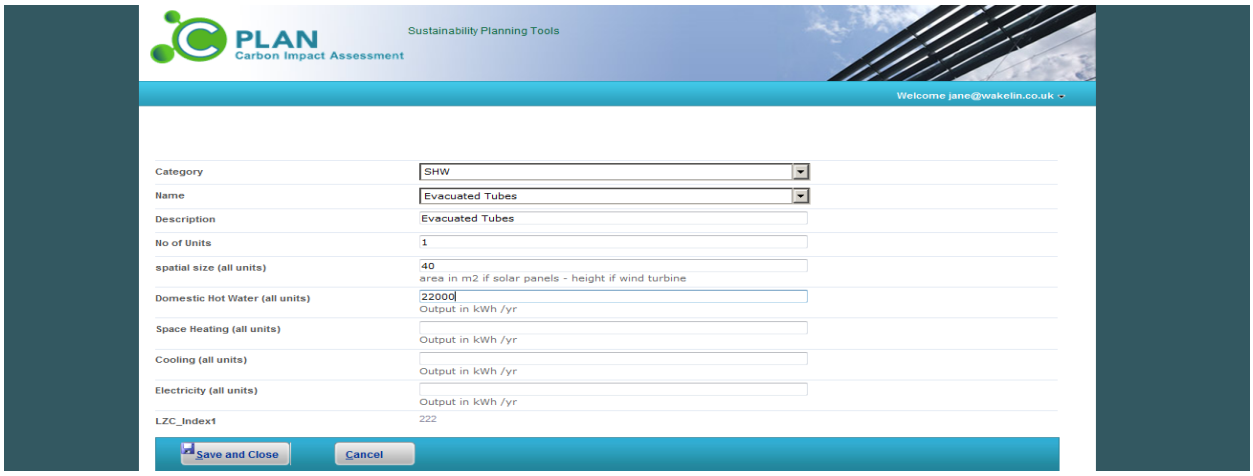
If the LZC technology selected produces heating for space, please specify the output in kWh /yr. (i.e. Useful demand met) of the system. Please note that the figure required is simply the energy output of the system, **not** the consumption saving which takes account of the efficiency of the displaced system.

Input 8 – **Cooling (all units)**

If the LZC technology selected produces cooling for space, please specify the output in kWh /yr. (i.e. Useful demand met) of the system. Please note that the figure required is simply the energy output of the system, **not** the consumption saving which takes account of the efficiency of the displaced system.

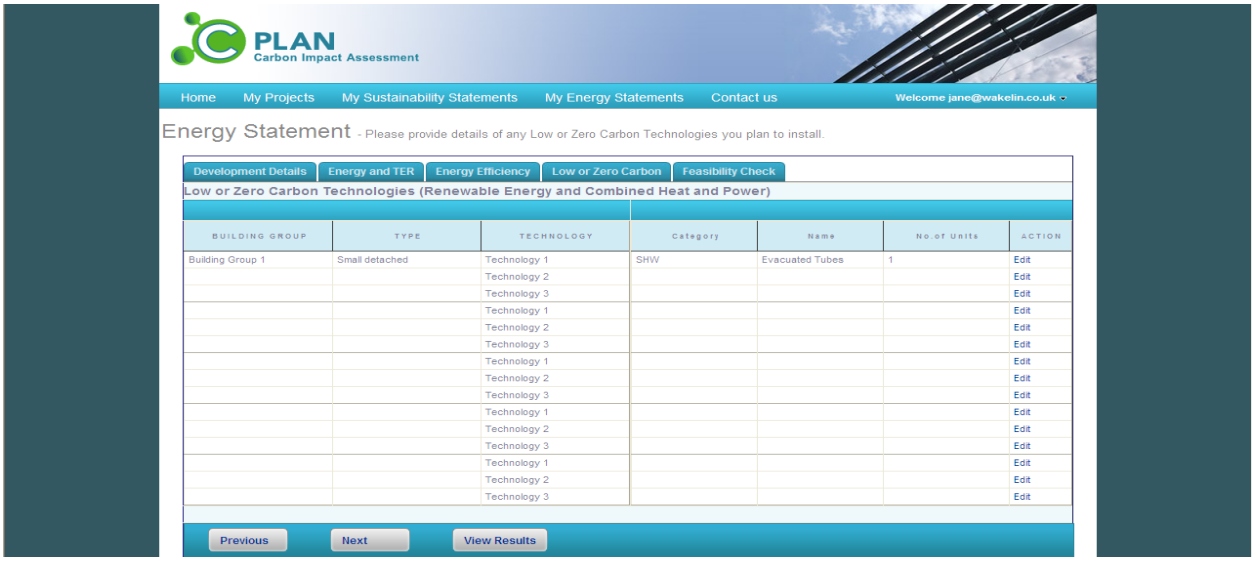
Input 9 – **Electricity (all units)**

If the LZC technology selected generates electricity, specify the output in kWh /yr. of the system.



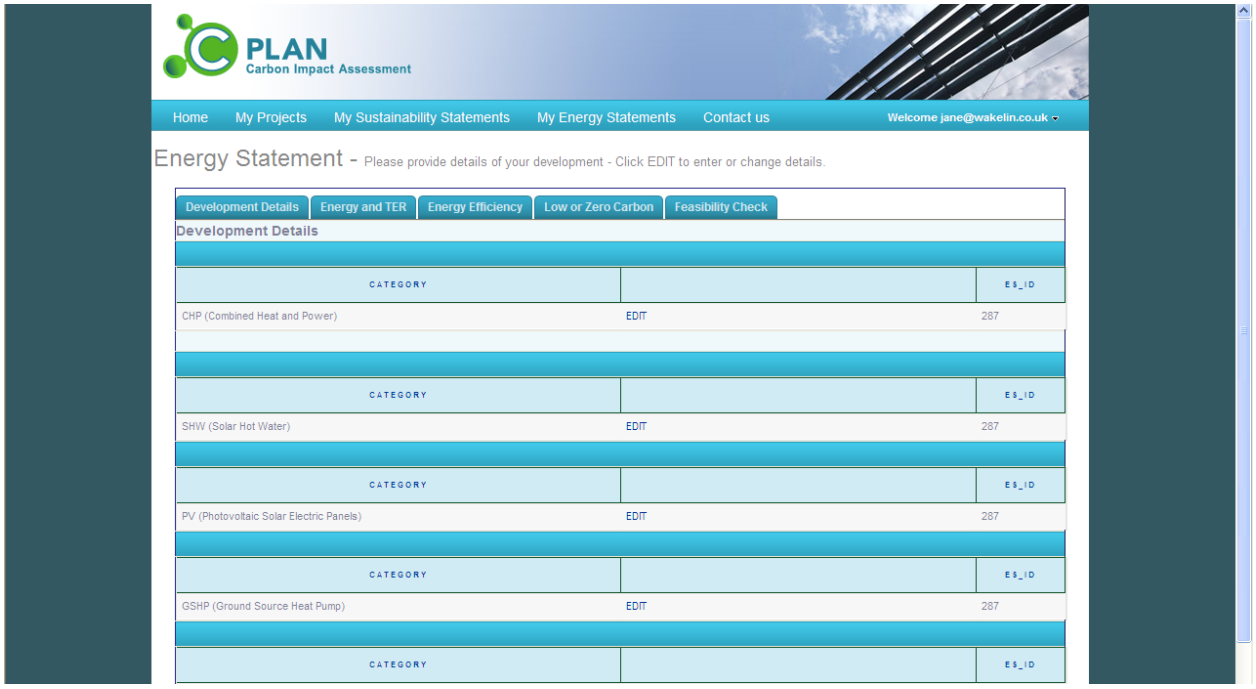
Once completed click the 'save and close' button.

Repeat for the second type of LZC technology in the first Building group if applicable, by clicking the second 'edit' link across from the building group. Repeat for the third type of LZC technology in the first Building group if applicable, by clicking the third 'edit' link across from the building group. Repeat the above for the other building groups created in the development if applicable.

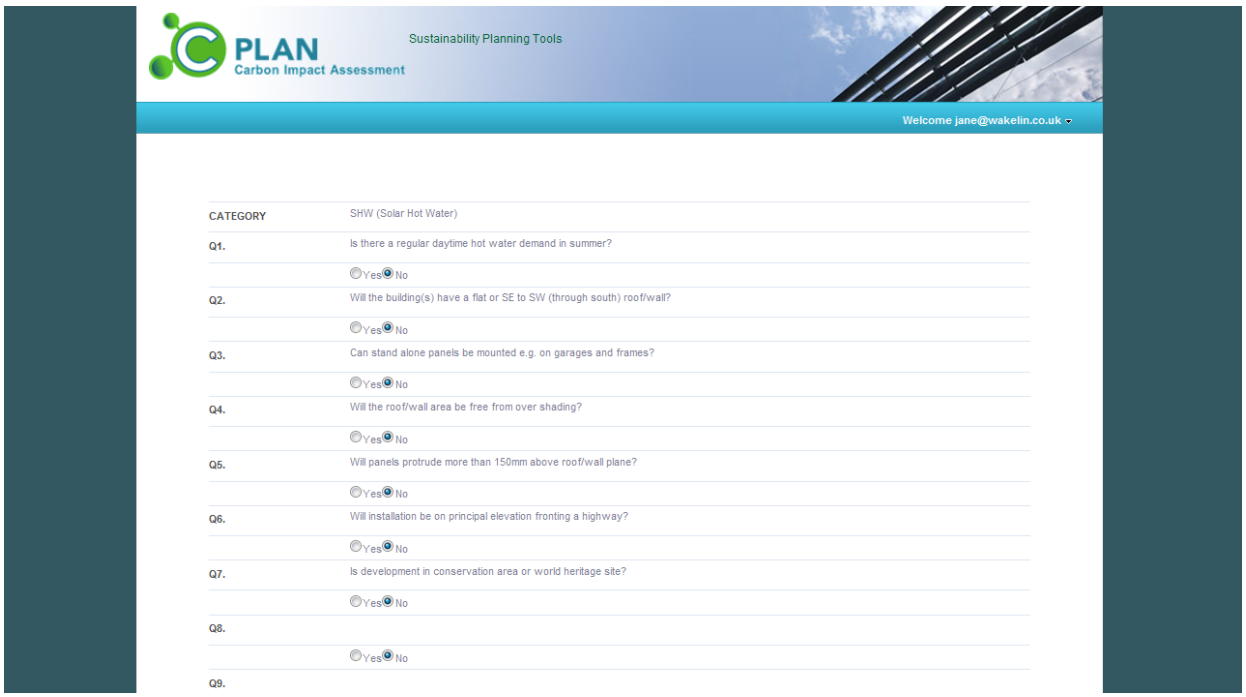


6.5 Feasibility Check

This section is to assess the feasibility of the potential LZC technologies. This is achieved by answering a series of set questions particular to each type of technology.



Select the first LZC technology by clicking on the 'edit' link e.g. SHW.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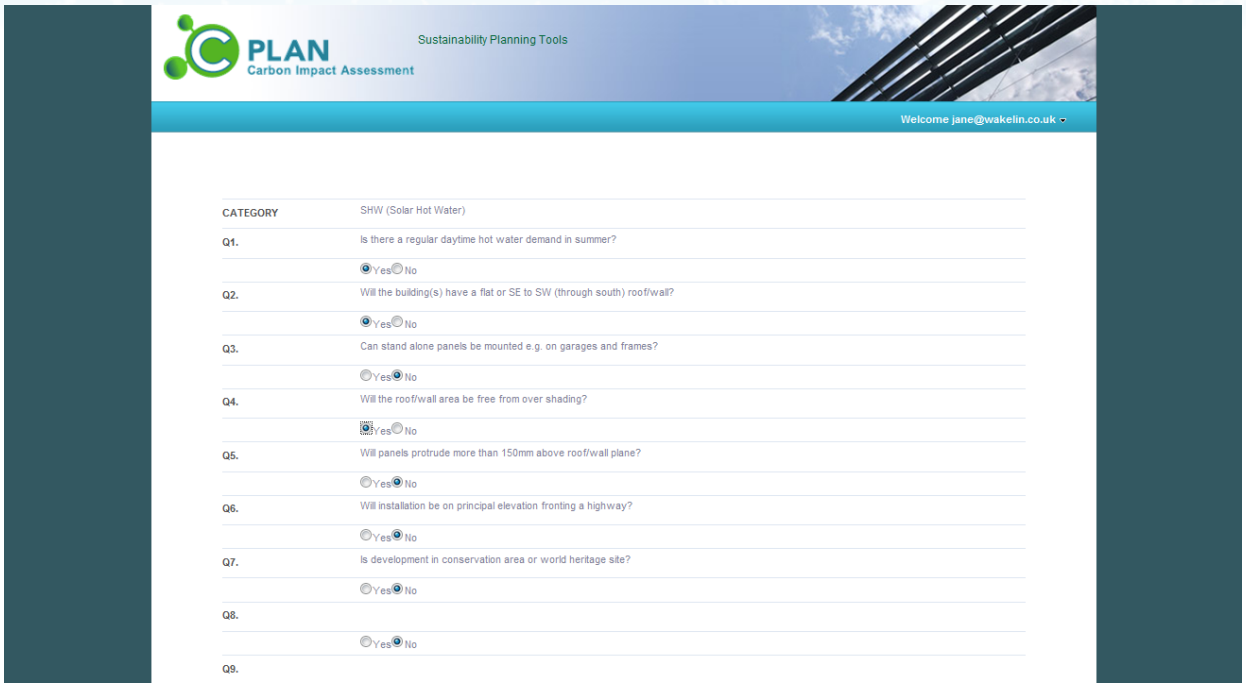
CATEGORY
SHW (Solar Hot Water)
Q1.
Is there a regular daytime hot water demand in summer?
Yes
No
Q2.
Will the building(s) have a flat or SE to SW (through south) roof/wall?
Q3.
Can stand alone panels be mounted e.g. on garages and frames?
Q4.
Will the roof/wall area be free from over shading?
Q5.
Will panels protrude more than 150mm above roof/wall plane?
Q6.
Will installation be on principal elevation fronting a highway?
Q7.
Is development in conservation area or world heritage site?
Q8.
Q9.

Then answer a set of feasibility questions about that particular LZC technology by clicking 'Yes' or 'No'. All of the answers are defaulted to 'No'.



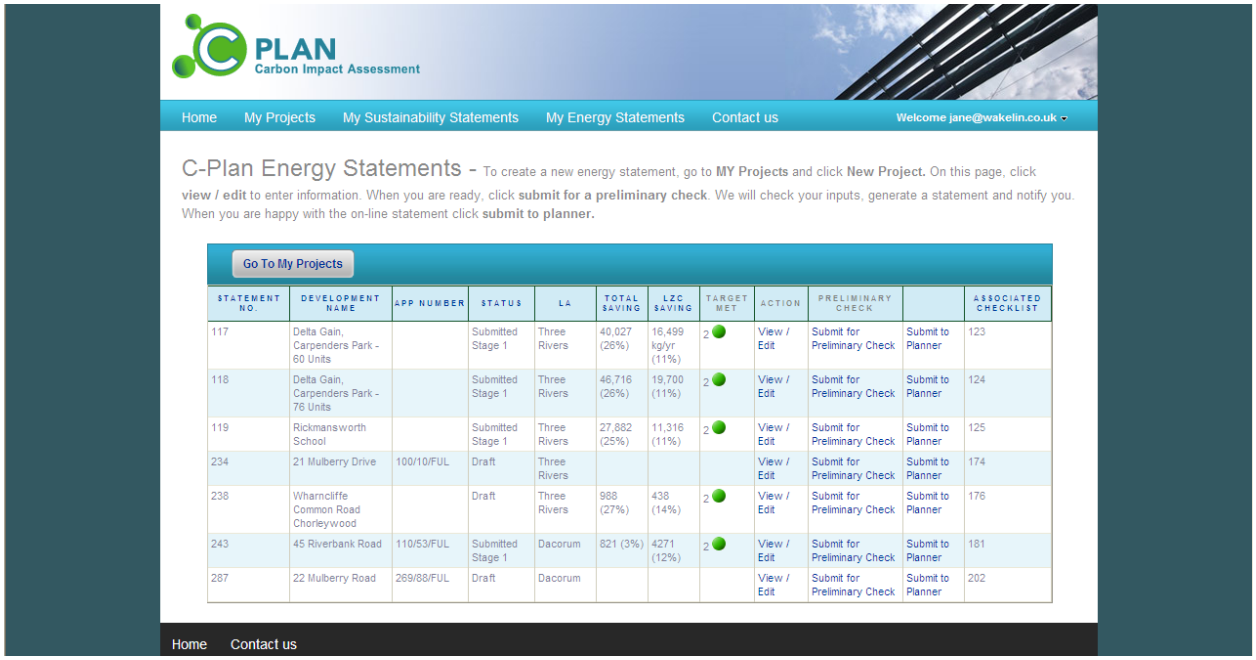
Once completed click the ‘save and close’ button.

Repeat this process for all other LZC technologies in the development if applicable.

7. Preliminary Check

Once all the data has been inputted for the development, the energy statement can then be submitted for a Preliminary Check. This will allow the information that has been entered in the on-line energy statement forms to be validated. This step is advisable prior to submitting to the case officer. There is no charge for this.

To do this go to the energy statements overview page by clicking the “My Energy Statement” tab.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My Sustainability Statements
My Energy Statements
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C-Plan Energy Statements - To create a new energy statement, go to MY Projects and click New Project. On this page, click view / edit to enter information. When you are ready, click submit for a preliminary check. We will check your inputs, generate a statement and notify you. When you are happy with the on-line statement click submit to planner.
Go To My Projects
STATEMENT NO.
DEVELOPMENT NAME
APP NUMBER
STATUS
LA
TOTAL SAVING
LZC SAVING
TARGET MET
ACTION
PRELIMINARY CHECK
ASSOCIATED CHECKLIST
117 Delta Gain, Carpenders Park - 60 Units Submitted Stage 1 Three Rivers 40,027 (26%) 16,499 kg/yr (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 123
118 Delta Gain, Carpenders Park - 76 Units Submitted Stage 1 Three Rivers 46,716 (26%) 19,700 (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 124
119 Rickmansworth School Submitted Stage 1 Three Rivers 27,882 (25%) 11,316 (11%) 2 View / Edit Submit for Preliminary Check Submit to Planner 125
234 21 Mulberry Drive 100/10/FUL Draft Three Rivers View / Edit Submit for Preliminary Check Submit to Planner 174
238 Wharncliffe Common Road Chorleywood Draft Three Rivers 988 (27%) 438 (14%) 2 View / Edit Submit for Preliminary Check Submit to Planner 176
243 45 Riverbank Road 110/53/FUL Submitted Stage 1 Dacorum 821 (3%) 4271 (12%) 2 View / Edit Submit for Preliminary Check Submit to Planner 181
287 22 Mulberry Road 269/88/FUL Draft Dacorum View / Edit Submit for Preliminary Check Submit to Planner 202
Home
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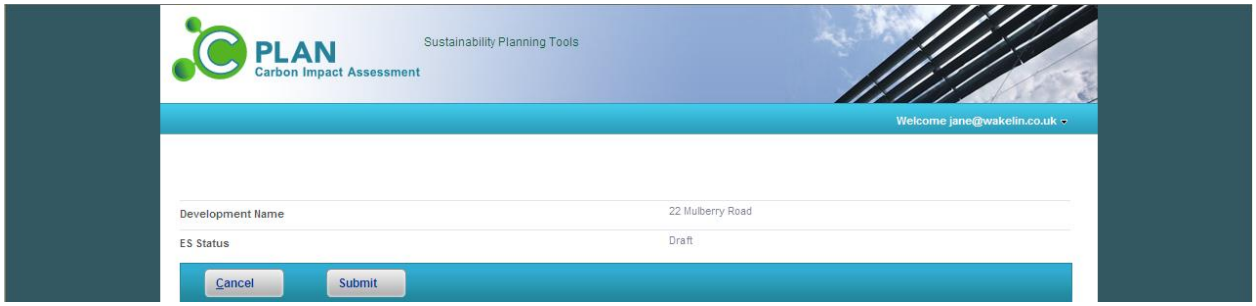
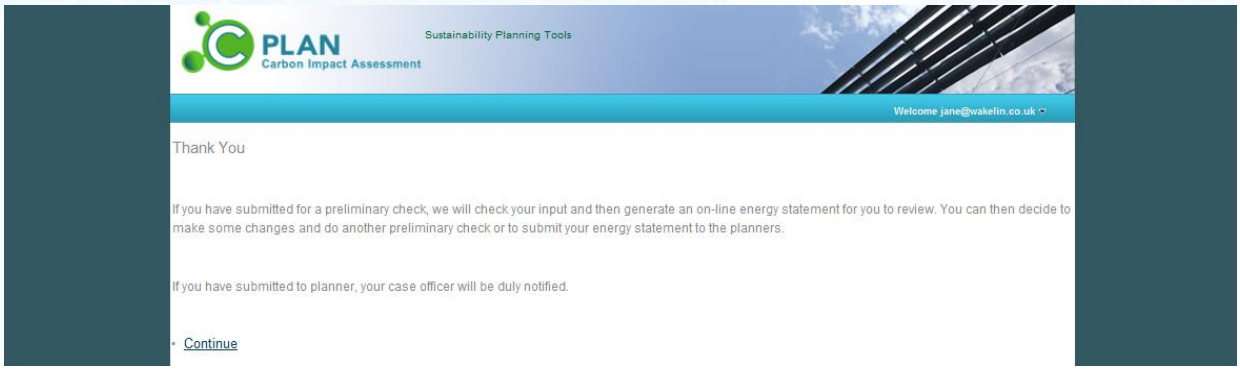
Across from the energy statement to be submitted for a Preliminary Check click the ‘Submit for Preliminary Check’ link. This link goes to a confirmation page.



To confirm click the ‘Submit’ Button.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Thank You
If you have submitted for a preliminary check, we will check your input and then generate an on-line energy statement for you to review. You can then decide to make some changes and do another preliminary check or to submit your energy statement to the planners.
If you have submitted to planner, your case officer will be duly notified.
Continue

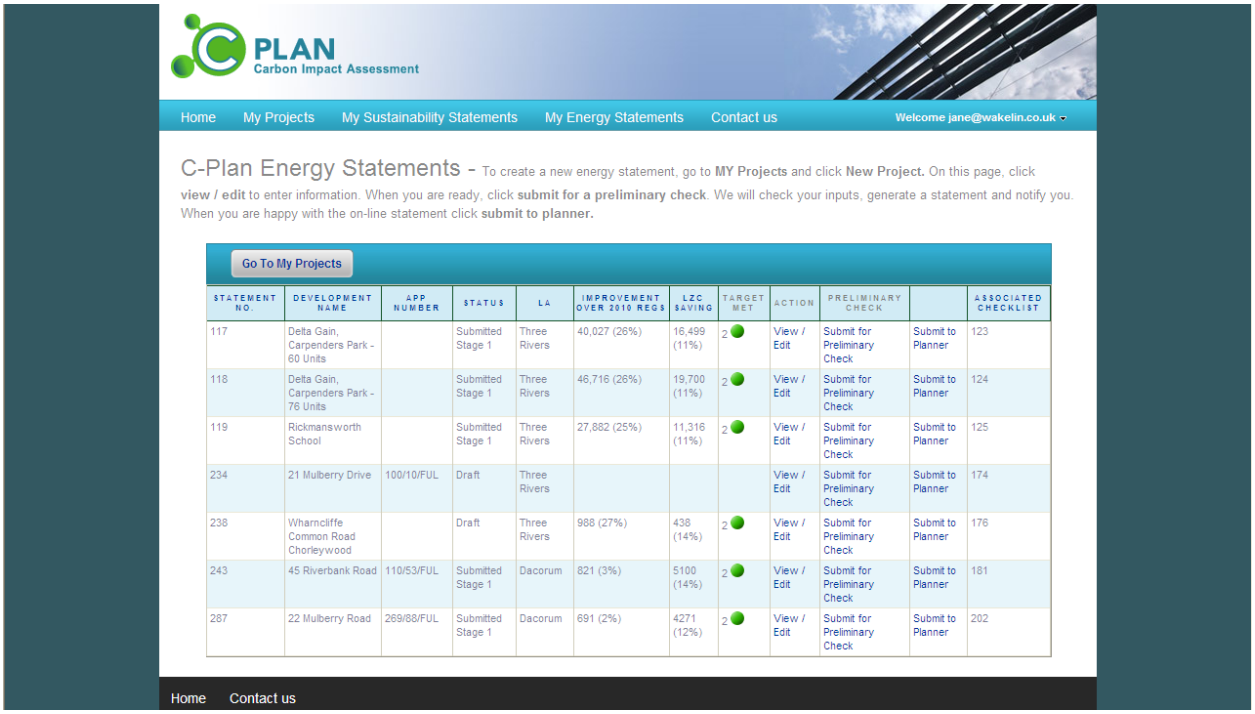
Once submitted, click 'continue' to return to the energy statement overview page.

If further changes are required, enter the new information as before and re-click the 'Submit for Preliminary Check' link again.

We will then generate the on-line energy statement and a notification email will be sent with a link to the generated on-line energy statement.

8. Viewing Results

Once your energy statement has been generated, the results, figures and indictor light will show on the energy statement overview page. A green indicator light means the target has been meet. A red indicator light means the target has not been meet.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STATEMENT NO.	DEVELOPMENT NAME	APP NUMBER	STATUS	LA	IMPROVEMENT OVER 2010 REGS	LZC SAVING	TARGET MET	ACTION	PRELIMINARY CHECK		ASSOCIATED CHECKLIST
117	Delta Gain, Carpenders Park - 60 Units		Submitted Stage 1	Three Rivers	40,027 (26%)	16,499 (11%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	123
118	Delta Gain, Carpenders Park - 76 Units		Submitted Stage 1	Three Rivers	46,716 (26%)	19,700 (11%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	124
119	Rickmansworth School		Submitted Stage 1	Three Rivers	27,882 (25%)	11,316 (11%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	125
234	21 Mulberry Drive	100/10/FUL	Draft	Three Rivers				View / Edit	Submit for Preliminary Check	Submit to Planner	174
238	Wharncliffe Common Road Chorleywood		Draft	Three Rivers	988 (27%)	438 (14%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	176
243	45 Riverbank Road	110/53/FUL	Submitted Stage 1	Dacorum	821 (3%)	5100 (14%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	181
287	22 Mulberry Road	269/88/FUL	Submitted Stage 1	Dacorum	691 (2%)	4271 (12%)	2	View / Edit	Submit for Preliminary Check	Submit to Planner	202

To view a particular energy statement results, click ‘view / edit’ on the overview page to enter the energy statement.

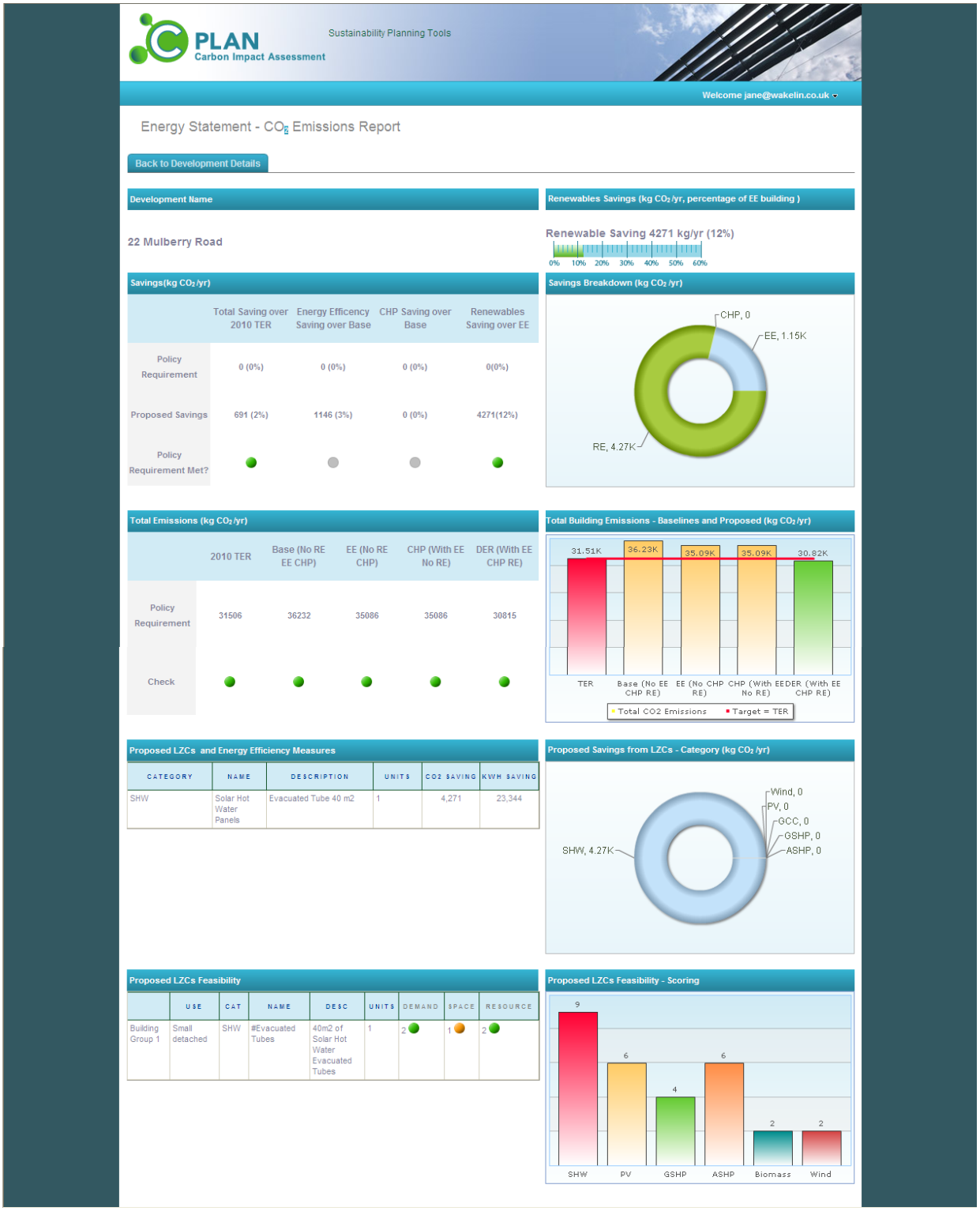
Once you have entered the energy statement click the

tab at the bottom of the page. This will take you to the dashboard.

The Energy Statement Dashboard brings together in a single screen all the summary information for an energy statement. It tells you what the target is, whether the proposed development is in compliance and whether the proposed technologies are feasible. This is done through a series of red, green and amber icons (or highlighting) and explanatory text along with graphs and charts.

Green = meets the target (or positive)
Amber = uncertain/marginal (referral may be required)
Red = does not meet target (or negative)

Example 'Dashboard'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Energy Statement - CO_2 Emissions Report
Back to Development Details
Development Name
22 Mulberry Road
Renewables Savings (kg CO_2/yr, percentage of EE building)
Renewable Saving 4271 kg/yr (12%)
0% 10% 20% 30% 40% 50% 60%
Savings(kg CO_2/yr)
Total Saving over 2010 TER
Energy Efficency Saving over Base
CHP Saving over Base
Renewables Saving over EE
Policy Requirement
0 (0%) 0 (0%) 0 (0%) 0(0%)
Proposed Savings
691 (2%) 1146 (3%) 0 (0%) 4271(12%)
Policy Requirement Met?
Savings Breakdown (kg CO_2/yr)
CHP, 0
EE, 1.15K
RE, 4.27K
Total Emissions (kg CO_2/yr)
2010 TER
Base (No RE EE CHP)
EE (No RE CHP)
CHP (With EE No RE)
DER (With EE CHP RE)
Policy Requirement
31506 36232 35086 35086 30815
Check
Total Building Emissions - Baselines and Proposed (kg CO_2/yr)
31.51K 36.23K 35.09K 35.09K 30.82K
TER
Base (No EE CHP RE)
EE (No CHP RE)
CHP (With EE No RE)
DER (With EE CHP RE)
Total CO2 Emissions
Target = TER
Proposed LZCs and Energy Efficiency Measures
CATEGORY NAME DESCRIPTION UNITS CO2 SAVING KWH SAVING
SHW Solar Hot Water Panels Evacuated Tube 40 m2 1 4,271 23,344
Proposed Savings from LZCs - Category (kg CO_2/yr)
Wind, 0
PV, 0
GCC, 0
GSHP, 0
ASHP, 0
SHW, 4.27K
Proposed LZCs Feasibility
USE CAT NAME DESC UNITS DEMAND SPACE RESOURCE
Building Group 1 Small detached SHW #Evacuated Tubes 40m2 of Solar Hot Water Evacuated Tubes 1 2 1 2
Proposed LZCs Feasibility - Scoring
9 6 4 6 2 2
SHW PV GSHP ASHP Biomass Wind

Breakdown of the ‘dashboard’

1 = Development Name – Name of the Development

2 = Renewables Savings (kg CO_2 /yr, percentage of EE building) – This bar chart shows the percentage savings in kg's of CO_2 per year from Renewable Energy over the Energy Efficient building.

The Energy Efficient Building is the building before any LZC technologies and CHP have been added, which incorporates improved design standards above the limiting design standards set out in Part L of the various buildings design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The significant improvement of design standards may achieve the TER without the use of LZC technology or CHP, but in many cases LZC technology and /or CHP is necessary to aid in achieving the TER.

3 = Savings (kg CO2 /yr) – This summary table gives a detailed breakdown of CO_2 savings of the building along with the policy targets and indicator light to show the applicable policy and if it has been meet or not by using green, amber or red. The CO_2savings are broken down as follows:

- *Total Saving over 2010 TER*(Target Emission Rate). The TER is the minimum baseline level of emissions in kg of CO_2 per m^2 (estimated) that the building needs to achieve in order to comply with 2010 Building Regulations.

- *Energy Efficiency Saving over Minimum Standards Building.* The Minimum Standards Building is the building before any LZC technologies and CHP have been added, built to the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The achievement of the TER is likely to require significantly better standards of the above elements than limiting design standards set out in Part L.

  Energy Efficiency Savings are achieved through improving design standards above the limiting design standards set out in Part L for various elements of the building design such as those listed above.

- *CHP Saving over Minimum Standards Building.* The Minimum Standards Building is the building before any LZC technologies and CHP have been added, built to the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The achievement of the TER is likely to require significantly better standards of the above elements than limiting design standards set out in Part L.

  CHP Savings are achieved through the incorporation of Combined Heat and Power supply into the building.

- *Renewable Savings over Energy Efficient Building*. The Energy Efficient Building is the building before any LZC technologies and CHP have been added, which incorporates improved design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The significant improvement of design standards may

achievement the TER without the use of LZC technology or CHP, but in most cases LZC technology and /or CHP is required to aid in achieving the TER.

4 = Savings Breakdown (kg CO_2 /yr) – This pie chart shows the proportional savings breakdown in kg's of CO_2 per year from the three types of possible savings, Energy Efficiency, Renewable Energy and CHP.

Energy Efficiency Savings are achieved through improving design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps.

Renewable Energy Savings are achieved through the incorporation of LZC technologies into the building.

CHP Savings are achieved through the incorporation of Combined Heat and Power into the building.

5 = Total Emissions (kg CO_2 /yr) – This summary table gives a breakdown of total kg's of CO_2 per year of the different combinations of the buildings emissions. The Total Emissions are broken down as follows:

- *2010 TER*(Target Emission Rate). The TER is the minimum baseline level of emissions in kg of CO_2 per m^2 (estimated) that the building needs to achieve in order to comply with 2010 Building Regulations.

- *Minimum Standards Building.* The Minimum Standards Building is the building before any LZC technologies and CHP have been added, built to the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The achievement of the TER is likely to require significantly better standards of the above elements than limiting design standards set out in Part L.

- *Energy Efficient Building.* is the building before any LZC technologies and CHP have been added, which incorporates improved design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The significant improvement of design standards may achievement the TER without the use of LZC technology or CHP, but in most cases LZC technology and /or CHP is required to aid in achieving the TER.

- *CHP Building.* The CHP Building is the building before any LZC technologies have been added, but after CHP has been incorporated, which also incorporates any improved design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps.

- *DER Building.* This is the actual building, after any improved design standards to improve the energy efficiency of the building have been incorporated and after any LZC technologies and CHP have been incorporated.

6 = Total Building Emissions - Baselines and Proposed (kg CO_2 /yr) - This bar chart corresponds with the summary table *Total Emissions (kg CO_2 /yr)*, it gives a breakdown in kg's of CO_2 per year of the different combinations of emissions and there relation to the target policy. The red target line is based on policy target. The Total Emissions are broken down into individual bars as follows:

- *2010 TER*(Target Emission Rate). The TER is the minimum baseline level of emissions in kg of CO_2 per m^2 (estimated) that the building needs to achieve in order to comply with 2010 Building Regulations.

- *Minimum Standards Building.* The Minimum Standards Building is the building before any LZC technologies and CHP have been added, built to the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The achievement of the TER is likely to require significantly better standards of the above elements than limiting design standards set out in Part L.

- *Energy Efficient Building.* is the building before any LZC technologies and CHP have been added, which incorporates improved design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps. The significant improvement of design standards may achievement the TER without the use of LZC technology or CHP, but in most cases LZC technology and /or CHP is required to aid in achieving the TER.

- *CHP Building.* The CHP Building is the building before any LZC technologies have been added, but after CHP has been incorporated, which also incorporates any improved design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps.

- *DER Building.* This is the actual building, after any improved design standards to improve the energy efficiency of the building have been incorporated and after any LZC technologies and CHP have been incorporated.

7 = Proposed LZCs and Energy Efficiency Measures – This summary table list the LZC technologies and the Energy Efficiency measures to be incorporated into the development.

LZC technologies include, SHW = Solar Hot Water, PV = Photovoltaic, GSHP = Ground Source Heat Pump, ASHP = Air Source Heat Pump, Biomass, Wind, Water Power = (Hydro Electricity), CHP = Combined Heat and Power, GCC = Ground Coupled Cooling.

Energy Efficiency Saving Measures are achieved through improving design standards above the limiting design standards set out in Part L of the various building's design elements, such as U-Value's, Air Permeability, Boiler Efficiency, Specific Fan Power and Percentage of Energy Efficient Lamps.

8 = Proposed Savings from LZCs - Category (kg CO_2 /yr) – This pie chart gives the proportional savings breakdown in kg's of CO_2 per year from the different types of LZC technologies.

LZC technologies include, SHW = Solar Hot Water, PV = Photovoltaic, GSHP = Ground Source Heat Pump, ASHP = Air Source Heat Pump, Biomass, Wind, Water Power = (Hydro Electricity), CHP = Combined Heat and Power, GCC = Ground Coupled Cooling.

9 = Proposed LZCs Feasibility - This feasibility summary table list's the LZC technologies in the development and which building group they are in, it then gives an indicator light rating of the LZC technologies based on whether there is a demand for it, whether there is sufficient space for it and whether there is a sufficient resource for it.

10 = Proposed LZCs Feasibility – Scoring – This bar chart gives a feasibility score out of 10 on the main LZC technologies based on the answers given in 'Feasibility Check'.

The LZC technologies listed are: SHW = Solar Hot Water, PV = Photovoltaic, GSHP = Ground Source Heat Pump, ASHP = Air Source Heat Pump, Biomass and Wind.

To exit the 'dashboard' and return to the energy statement, click the 'Back to Development Details' tab on top.

9. Submitting to Planner

If the energy statement is now complete and requires no further changes, the energy statement can now be submitted the relevant case officer.

To do this go to the energy statements overview page by clicking the “My Energy Statement” tab.

Across from the energy statement to be submitted, click the ‘Submit to Planner’ link. This link goes to a confirmation page.

To confirm click the ‘Submit’ Button.

10. Frequently Asked Questions (FAQ's)

The following FAQs is not exhaustive but should help you answer many of the common questions relating to C-Plan.

Important Note

- We would welcome any suggestions for FAQs which should be added to better assist new users of C-Plan. If you have any suggestions or you have a question which you cannot find the answer in this guide, please contact the C-Plan help and support team. All suggestions for FAQs should be sent to the C-Plan help and support email address with "FAQ" in the subject line.

What should I do if I have forgotten my password?
Go to the C-Plan Portal site (: www.sustainabilityplanner.co.uk/anon/dacorum_home.aspx), click on the 'sign in' link on the top right and use the "Reset my password?" function to request a reset. You can also contact the C-Plan Help and Support Team on 01483 749 048.

What should I do if the screen freezes?
Refresh your browser.

How do I view an energy statement?
To view an energy statement from the "My Energy Statements" tab after you have logged in.

What does the Preliminary Check process do?
This process checks that all the information required has been entered into the on-line energy statement forms and therefore allows the energy statement to be validated and the results 'dashbord' to be generated. If required information is missing a member of the support team will contact you. The process does not check if the development has met the required policy or not.

Why are some of the tables and graphs in my energy statement dashboard empty?
There may be insufficient data available to fill tables and graphs. In some instances this will happen where the development doesn't require this data to be submitted. If you are unsure about this, please contact C-Plan help and support.

How do I know if an energy statement is right or not?
C-Plan has been configured to do this for you by showing either Green, Amber or Red lights or highlighting. The system will be configured for your local authority and as such should represent whether a development is meeting the specific targets set by your authority. There may be instances when data has been entered incorrectly. In these case we eill endevour to resolve these issues through discussions with you.

11. Help and Support

Please contact the C-Plan help and support team if you are experiencing difficulties with the system or you have a query. If you are calling please state to the call advisor that you are calling in relation to "C-Plan Dacorum".

While we will make every attempt to answer your query immediately, at busy times an advisor may not be available when you call. If this is the case please either leave a message or send an email and an advisor will get back to you as soon as possible.

Call 01483 749048
Email cplan@ecsc.uk.com

12. Your comments and feedback

If you would like any additional information or you have any comments about how this guide could better suit your needs, please let us know by emailing cplan@ecsc.uk.com

APPENDIX A - Glossary

ASHP	Air Source Heat Pump
BER	Building Emissions Rate
CO_2	Carbon Dioxide
CHP	Combined heat and power
DER	Dwelling Emissions Rate
GIFA	Gross Internal Floor Area
GSHP	Ground Source Heat Pump
kWh	Kilowatt hour
kWh/yr	Kilowatt hours per year
PV	Photovoltaic Energy
SAP	Standard Assessment Procedure
SBEM	Simplified Building Energy Model
SHW	Solar Hot Water
TER	Target Emissions Rate